

New parking plan discussed at ASCSM

Erik Charrier
Staff Writer

The highlight of the August 26 ASCSM meeting was the special session on campus parking. The meeting was attended by Gary Bowersock, the Director of Facilities Management, who presented the parking component of the CSM Master Plan. After his presentation, Gary stayed for nearly an hour to address student concerns about parking.

According to Bowersock's presentation, the CSM Master Plan calls for the CSM campus to become more of a pedestrian campus. For example, pedestrian access is to be improved by a foot bridge or tunnel across 6th avenue. Gary also highlighted the new parking meter system. This system is designed to make it easier for visitors to find parking by allowing them to purchase parking on arrival.

The first issue raised in the Q&A session was overflow for tiered parking. Students felt that if all the higher tier parking spaces were occupied, people with the higher tier permits should be able to park in the lower tier lots. Support for this

change was overwhelming and led to a quick change in time for the start of the new parking plan. As of August 31st, the parking system was changed to allow permit holders to park down. Reserved permits are now allowed in general and commuter parking. General permits are now allowed to park in commuter lots and commuters are allowed to overflow into the remote lots. However, permit holders are strongly encouraged to park in their tier unless there is no room left.

A Geology museum staff member voiced concerns that there is no easy parking available for visitors due to the new parking system and the Golden parking permit system. They argued that this is likely to decrease community usage of the Geology Museum and is an affront to their donors and other off campus associates.

Mines Park residents raised concerns about other people parking in their parking spaces and filling up the parking. Also, concern was raised with regard to the safety of the pedestrians crossing 6th Avenue. It was suggested that the proposed footbridge would cut down on the number of people driving from

Mines Park to campus and therefore reduce congestion on campus. Gary noted that they are trying to encourage people to walk to campus from Mines Park.

Echoing the concerns from Mines Park residents, some of the Greeks were concerned that there would be too many non-Greeks parking on Greek street.

Upperclassmen brought up the new policy of freshmen leaving cars in prime general parking real estate and not moving them for days at a time. According to a recent email, there are incentives being offered for students living in the traditional residence halls and Weaver Towers to park in outlying lots during the week. Furthermore, the policy of allowing freshmen in general parking is under review for future semesters.

Finally, it should be noted that a student asked the cost of the parking meters. The response of about \$130,000 elicited an immediate negative response from some of the audience

After the Q&A session, ASCSM appointed Jonathan Harrelson as the new ASCSM secretary following the resignation of the previous ASCSM secretary.



Ian Littman / Oredigger

Mines recently installed solar-powered parking kiosks in many parking lots across campus.

Light breaks chip performance barrier

Joshua Kleitsch
Staff Writer

With excessive amounts of homework, tests, and the hundreds of extra-curricular activities offered here at Mines, many students are unaware of the exciting research happening right in their own backyard.

In the physics department, master's graduate Jon Banks talks about the research he is involved in. Working in a research group, Banks focuses on Integrated Optics, which essentially means he is figuring out how to put fiber optics on a processor chip, virtually eliminating the communication time between cores on a multi-core processor. With the speeds of current processors, the last real bottleneck within the chip itself is how the individual cores send information between themselves. What this particular group of researchers is trying to do is to eliminate that bottleneck by placing circuits that use light on the chip itself. This would pave the way for vast increases in processing power, potentially making it feasible to use 20 cores on a single chip.

Banks' main task within this group was testing the chips themselves to verify their functionality. "I really like doing these experi-

ments, just finding out the different characteristics of things," Banks commented.

Many students have the preconception that students are not the ones doing the 'fun' stuff; assuming professors and the faculty run experiments while the students work on the write-ups and papers.

In reality, the students do the experiments, run the simulations, etc. The professors are just there to oversee the operation and to help with the experiments if something goes wrong. "The professors also come and help you do the experiments, so it's not like they're never in the lab", Banks adds. Most advisers spend their time in the administrative and technical realm, as they oversee management of the experiment, progress, and budgets.

For Banks, that advisor is David Flammer, a 2000 Mines graduate. Working on research since 2006, Flammer further explained the work in Integrated Optics. "Intel in particular is doing significant research in optical interconnects... what they're looking at doing is using optics to eliminate that bottleneck created when you put multiple processing cores on a single chip."

The applications for Integrated Optics are numerous, ranging from CPUs in computers to smartphones, televisions, cameras, really anything that operates using a processor of

some kind. And the possibilities for optical switches and circuitry do not stop at processors. Currently the main reason we don't have Internet upload or download speeds in the gigabyte per second range is because the switches on either end of a fiber optic cable cannot handle that amount of data. People like Banks and Flammer are on the cutting edge of this research, and it's happening here, at Mines.

For students interested in research opportunity, Banks offered some advice. "If you want to do research, definitely talk to professors early. I know there are people who have started doing research in their sophomore and junior years." Flammer agreed, saying, "There are a lot of opportunities out there, it's just a matter of looking for them."

There are definitely projects that require some experience, but talk to professors even if you don't think you have the necessary experience. One additional piece of advice Jon gave was to "get your papers published, like the papers you helped on, and put that on your resume, because that will help you get a job in the future."

There are plenty of research opportunities like Integrated Optics, and Mines is leading the way in developing students and new technologies.

Campus Dining heard you

Press Release
Campus Dining

Colorado School of Mines Campus Dining is thrilled to announce changes to their dining locations beginning this fall based on feedback received from CSM students, faculty, and staff. The exciting changes are highlighted below.

New Meal Exchange Program at Diggers Den

You can now use a meal plan swipe at Diggers Den! Choose an entrée from our new after-hours menu along with two sides and a fountain drink and pay with a meal swipe. Visit Diggers Den Monday through Thursday from 7:00 PM – 9:00 PM to take advantage of this new program designed with students in mind.

Don't forget, Slate Café also offers a grab n' go meal exchange program. Use a meal swipe and receive a sandwich or wrap, chips, cookies, fruit, and a bottle of water to go from 11:30 AM - 7:15 PM Monday through Friday.

Slate Café Spices Things Up
Check out some of the awesome changes you will notice in Slate Café this fall!

1. More made-to-order action stations! An all-new omelet station will now be available at breakfast and dinner service in Slate Café. The station will highlight a featured omelet everyday, and will also transform to a

made-to-order pasta station during lunch service. Yummy!

2. Enjoy new menu items featuring your favorite entrées and new recipes based on student feedback. The variety you are looking for is here, including more healthy and vegetarian options.

3. Increased speed of service will be a Campus Dining focus this fall. The service line has been rearranged to allow you to get your food quicker!

4. Action! The pizza station will now feature "in your face" preparation, providing a fresh, appetizing option you will love.

5. Did you say carving station? Enjoy some of your favorite meat entrées at the all-new carving station. The station will feature turkey, roast beef, meatloaf, and more, and will be available approximately twice per week in the Slate Café.

Campus Dining Helps Reduce Waste through Composting

CSM Campus Dining has implemented a composting project to help the campus community reduce landfill waste. Campus Dining now composts all pre-consumer waste from cooking and preparation in the Slate Café kitchen. Along with this initiative, CSM Campus Dining also plans to implement composting of post-consumer waste by offering guests the opportunity to compost food waste into composting bins in Slate Café.

Scientific discoveries this week

Katie Huckfeldt, Content Manager

University of Santa Catarina, Brazil - Scientists from a laboratory on the Mediterranean Sea published their study on single-celled life-forms called Foraminifera that live around volcanic carbon dioxide vents off Naples, Italy. The study shows that increased CO₂ levels have caused Foraminifera to decrease from 24 to 4 species. The CO₂ acidifies the ocean which has a dramatic effect of species like Foraminifera that have a calcium carbonate shell. Scientists state that the tipping pH of 7.8 will likely occur by the end of this century unless CO₂ emissions begin to lower. At this critical pH we risk massive extinction of marine life and rises in toxic jellyfish and algae.

Gottingen, Germany - Max Planck researchers have succeeded in reducing the recording time for MRI images, giving a "live" look at muscles in action for the first time. Doctors can watch the bending of a knee, the beating of a heart, the movement of the eye and jaw and other areas of the body. This new method will supply vital information about joint and heart diseases. In addition, MRI exams will be made more comfortable for patients who traditionally had to remain absolutely still.

Romania - Fossils from a relative of the Velociraptor were unearthed by scientists giving long awaited insight into dinosaurs from the late Cretaceous period. The predator, named Balaur bondoc, is the first reasonably complete fossil of a carnivorous dinosaur during the last 60 million years of dinosaurs' existence in Europe. Balaur bondoc exhibited more than 20 anatomically unique features including short and stocky feet and legs and large pelvic muscles. Scientists state that the predator was more suited for kick-boxing than sprinting, leading to the nick-name "The Stocky Dragon."

Galilee, Israel - A 12,000 year old burial and feasting site was discovered by scientists, giving the first verification that community human feasting began before the occurrence of agriculture. Inside the burial cave the remains of 71 tortoise shells and three wild cattle carcasses were found in specific hollows and showed evidence of being cooked. Community feasts indicate the changing lifestyles of primitive humans, as once-nomadic groups were settling down. The new communities put pressure on local resources leading to the shift to animal domestication and agriculture.

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Headlines from around the world

Joshua Kleitsch, Staff Writer

A recent study by the U.S. Department of Education shows that technical, liberal arts, and nursing schools have the **highest loan repayment rates**. Surprisingly, liberal arts schools posted significantly higher loan repayment rates than many business schools.

The recent outcry over the pending construction of an **Islamic Community Center and mosque** near ground zero in Manhattan has anti-terrorism experts worried. Experts say that this message of intolerance is hurting U.S. relations with foreign nations, undermining our traditional stance as a nation of religious freedom and acceptance.

Due to the **recent resurgence of bedbugs**, many people are misusing pesticides or hiring exterminators that promise cheap eradication, often using dangerous pesticides meant for outside use. Local authorities in some cities are petitioning the EPA to legalize the use of banned chemicals to combat the infestation.

Republicans identifying themselves as **gay or lesbian are now seeking acceptance** by their fellow party members. Former Republican National Committee Chairman Ken Mehlman's affirmation of homosex-

uality two weeks ago has brought the issue to a head. The party, not traditionally supportive of gays, has received a fair amount of support from those claiming homosexuality.

While the BP oil spill in April seemed to stir congress to act on the controversial **energy and climate bill**, it remains stalled as fall elections near. The main point of contention seems to be the cap-and-trade section, which would seek to limit greenhouse gases through capping the amount of pollution that individual companies would be allowed to produce.

Tensions have increased between North Korea and UN na-

tions as more information about **North Korea's nuclear weapons** testing and arms dealing networks are being uncovered daily. Two N. Korean men have emerged as key proponents in N. Korea's arms program, revealing new information about N. Korea's arms trading with countries including Myanmar, Iran, and Syria.

While European markets continue to rise, the **jobless rate continues to hold** at a steady 10%. Economic recovery in the countries that use the Euro are seeing a rise in consumer spending and exports, but that rise has yet to be reflected in the creation of new jobs.



Local News

- The recently returned Colorado moon rock is now on display in the Geology Museum. The rock was first given to Colorado Governor John Vanderhoof in 1974 by President Nixon. For some time. The rock was missing from the state's possession but has since be returned.
- On September 11th, the second annual Field of Flags event will take place on Kafadar Commons. 2,993 flags will be placed on the grounds to commemorate the lives lost from the tragic attacks.
- Mines volleyball finished 3-1 overall at the Oredigger Volleyball Classic. Oredigger Elizabeth Serra-Hsu was named for the all-tournament team. CSM will next compete in the Angelo State University Invitational September 10th and 11th in San Angelo, Texas.
- Ready your resumes! The Fall 2010 Career fair is coming soon. Be ready by Tuesday September 14th to look for prospective internships and careers.
- On Wednesday, September 15th , the CSM Geology Museum will be holding an open house and silent auction from 6-9 PM. The open house coincides with the Denver Gem and Mineral show.

Stars shine bright above Mines

John Bristow
Guest Columnist

The night sky is a vast tapestry that covers us for about half of our lives. Surprisingly, for such a prevalent image, very few people can identify anything more than a handful of well-known constellations and our satellite, the Moon. While these are elegantly familiar, there is so much more to the stars, which can be found with a small amount of guidance. That is where this column comes in. The cosmos is an inspiring sight and hopefully after a few articles, you too will be able to find the beauty of the universe above you.

So if this is the beginning, what will we need to move on? Depending on how serious you are, there is a wide array of tools that can help to unveil the stars. If you are reading this, you already have the first few: eyes and an inquisitive nature. Most of what this column will cover can be easily seen by the naked eye.

Professor Farca: Instructor, author and ice cream lover

Stephen Hejducek
Staff Writer

Growing up in Timisoara, Romania, a small town in western Romania near the border of Serbia and Hungary, a young Professor Farca knew at an early age that she wanted to become a professor of linguistics and literature. “In first grade, I realized I was not good at math at all. I got too many Cs in physics and chemistry,” she explained in an interview. “I have always enjoyed reading and writing, so I understood at an early age that literature and teaching would come naturally to me. I was not wrong.”

For the last ten years, Professor Farca has been living stateside with her husband. Initially moving to Denver due to her husband's job working at an optics company, Professor Farca swiftly decided that she needed to find a teaching job in Colorado. Professor Farca stated, “I feel fortunate to teach at Mines, an engineering school, because I have many engineers in my family; my parents, brother and grandfathers have all been engineers.”

Professor Farca has been working at the Colorado School of Mines since 2008 and she has been very impressed with the students that she has taught. “Many of my students say they do not like to read and write, but in reality, they are remarkably gifted writers and critical thinkers.” Professor Farca presents the duality of every decision in the Nature and Human Values classes that she teaches. She presents the fact that no issue is ever simply presented as a black and white problem. She promotes her students to speak freely in class and offers a very comfortable

environment where all opinions are welcomed and debated. When discussions begin to settle in Professor Farca's classroom, she likes to add small questions so that the students open their minds to both sides of an argument.

Still, there will surely be objects that can be enhanced by visual aids. If you have a set of binoculars, it will aid your search. Unless you already have a telescope, I would not recommend purchasing one. They can be expensive, and while they are a cool display piece and can help you see a bit further, binoculars should do the trick for just about everything.

Other handy tools include a planisphere (a basic star chart) and a red flashlight. These can be found for a low price online (be sure to get one for star observations in the Northern 40's for observing at Mines) and will aid you in finding just about anything year round.

While there will be no official stargazing topic this week, I suggest familiarizing yourself with the large fall constellations such as Ursa Major to the north and Sagittarius to the south. Also enjoy the waning Moon that will lead to a New Moon on September 8. Peace, and may the stars shine brightly in your sky.

Ph.D. in English Literature and her second MA at Oklahoma State University, she also received an education at West University at Timisoara, where she earned her first MA in linguistics and her first BA in English and Romanian Literature and Languages. Professor Farca recently used all of her education to co-author a book for the Nature and Human Values course. “Along with my talented colleagues, Courtney Holles and Shira Richman, I wrote A Student's Guide to Nature and Human Values.” Professor Farca explained, “The textbook will help students write and revise papers for Nature and Human Values, understand ethical theories, and become more adept at research. Not only did she work on this textbook for students, she also had a very productive summer. “I revised my dissertation, Roots to Routes: Contemporary Indigenous Fiction by Women Writers in the United States, Canada, Australia, and New Zealand. The book is expected to publish next year,” says Professor Farca.

Of course, every professor at the Colorado School of Mines has a life outside of work and grading papers, and Professor Farca is no different in this regard. “I will tell you three things: I can live on an ice cream-only diet (chocolate works too), my favorite tennis player is Rafael Nadal, and I root for A.C. Milan, the Italian soccer team.” The Colorado School of Mines is proud to have a professor as intellectual as Professor Paula A. Farca.

Apple refreshes iPods, iTunes, appleTV

Ian Littman
Asst. Business Manager,
Web Content

Last Wednesday, Apple refreshed its digital media lineup, ranging from revised iPods to a new music-focused social network to a revamped Apple TV home theater box. Apple CEO Steve Jobs noted during the event staged at San Francisco's Yerba Buena Center that over 120 million iOS devices (iPhones and iPod touches) had been sold, with 230,000 new devices being activated via their iTunes companion software every day.

Apple's first hardware announcement was an upgrade to the iPod shuffle. In response to widespread criticism about the previous-generation shuffle's lack of buttons, Apple decided to return to a form factor similar to the iPod shuffle generation before, trading larger size for usability, while adding VoiceOver (text-to-speech) functionality, a memory upgrade to 2GB, and a lower price of \$49 to the mix. One significant physical difference between the second- and fourth-generation iPod shuffles is that the new model is effectively square, exciting concerns that operation of the music player's built-in clip will result in inadvertent button presses, a problem that did not exist in the previous, more rectangular model.

Next, Apple introduced a completely redesigned iPod nano. The new media player eschews the previous generation's video camera and movie playback capability for a smaller, square form factor not unlike the iPod shuffle, but with a 1.54-inch touch screen to replace the hardware buttons. Jobs stated that the new iPod nano, which has drawn comparisons to

a Dick Tracy watch (but without the two-way radio), was designed with runners and other exercise situations in mind. Response to the announcement was mixed; concerns included the omission of previously included iPod features, the device's significantly decreased screen size, and the potential difficulty of navigating a pure touch interface on such a small screen.

Apple's final iPod announcement was that of a more powerful iPod touch. The new iPod brings the iPhone-sans-phone to feature parity with its cellular contemporary, adding a six-axis gyroscope, significantly faster processor, high-resolution “retina” display, and dual cameras to Apple's 2010 take on the concept of a PDA. One notable omission from the iPod touch when compared with the iPhone (other than a GSM/HSPA cellular radio) is high-resolution still photo capability on the iPod touch's rear camera; the iPhone 4 can take 5 megapixel still images, whereas the iPod touch can only capture images at a maximum resolution of 960x720 (about .6 megapixels). On the plus side, the new iPod touch is the thinnest iPod touch to date, and the rear-facing camera takes 720p high-definition video just like the iPhone, and includes Apple's FaceTime video chat system. All iPod touch models were upgraded as opposed to Apple's last version iteration where an upgrade to the low-end, 8GB iPod touch was conspicuously absent.

Apple also released significant software upgrades for iOS, the operating system used by iPod touches, iPhones and iPads, and iTunes, the desktop media manager that syncs with those devices. iOS 4.1, arriving this week, adds high dynamic range photography to camera-enabled iOS devices, a feature that combines three successive

photos taken with different exposure levels to produce a composite image with better highlight and shadow detail than is possible with a single image capture on comparable equipment. Other features include GameCenter, Apple's new game matchmaking service, video streaming via WiFi to Apple TVs (more on that later), and TV show rentals (99¢ per high-definition episode). iOS 4.2, arriving in November, will bring the above features to the iPad, plus support for printing documents from the iPhone, iPod touch, or iPad.

On the iTunes front, iTunes 10, made available late on the day of the announcement, eschews the CD in the application's logo, adds a more efficient album-based view to its library manager, and adds TV rentals to the list of content available on the iTunes store. However, the biggest new feature of iTunes 10 is Ping, a music-centric social network that bears a strong resemblance to Lala, an online music store that Apple bought, and subsequently shut down, earlier this year.

Apple's final announcement was a complete rework of their Apple TV set top box. The new model drops a built-in hard drive and non-HDMI video outputs in exchange for a footprint three quarters smaller than that of the previous Apple TV and a price drop to \$99. The device now relies completely on streaming, either from the iTunes store, a desktop or laptop computer, or an iOS device to procure its content, which is still limited to 720p HD. The iOS streaming feature, known as AirPlay, arrives on the iPod touch and iPhone with iOS 4.1, and on the iPad with iOS 4.2. The Apple TV will be available for purchase later this month.

Google Chat calls “real” phones

Ian Littman
Asst. Business Manager, Web Content

Two Wednesdays ago, Google took their Google Voice concept a step further, adding voice calling to and from standard phone numbers to their GMail web interface. Twenty-four hours later, the company stated that they had completed over one million phone calls through the system, which allows users to call locations in the United States and Canada for free, and international locations for very low per-minute rates.

The system works tightly with Google Voice, which is now available to any user with a Google account in the United States. Calls placed and received via the GMail-based voice system are logged in Google Voice, and contacts in GMail's address book integrate seamlessly into both systems, including many smartphones via Google Sync, Google's surrogate Exchange ActiveSync server. Additionally, Google Chat, as the service is called, shows up as a po-

tential number for Google Voice's phone forwarding rule selection, which has historically allowed incoming and outgoing calls to be connected to a user's choice of land-line or mobile phones. On the voicemail side, messages are machine-transcribed and sent via e-mail and/or text message as well as displayed in the Google Voice interface, though transcription quality tends to leave significant room for improvement, from the author's experience.

Pundits are arguing which company is impacted the most by this announcement: Skype, traditional telephone companies, or Facebook, which recently partnered with Vonage to start a Voice over IP solution of their own. Google Voice significantly undercuts Skype's per-minute rates to traditional phones, though Google has left open the possibility of charging per-minute for outgoing calls to the US and Canada, and users seem to prefer an application like Skype running on their computers to a sub-window of GMail. Likewise, traditional telephone companies

have hardware phone systems, which Google Chat does not, though Google Voice allows users to route calls to both standard (landline/cellular) and PC-based (Google Chat or the Google-owned Gizmo Project) phones using the same incoming number.

One important note: Google Chat is not yet available for GMail accounts based on Google Apps, such as Mines's MyMail system. Google says it is working on establishing feature parity between Google Apps and “direct” Google accounts, so MyMail users and others on Google Apps based systems may not have long to wait until this feature is available to them. For now though, a standard GMail account is free to create and Google has honed the service over the past week or two to the point that the system is high-quality enough to use as a viable supplement to a mobile phone, or as an easy way to circumvent long distance charges associated with a landline, as long as you are comfortable using your computer to make the call.

Geek of the Week

...Tim Weilert, Senior: Mechanical Engineering

Roby Brost
Staff Writer

On the beautiful Mines campus, there is a quiet, subconscious competition. In fact, this competition is so quiet that contestants rarely know that they are in the running for the title. Despite the stealthy nature of the beast, competition is fierce, and occurs on a minute-to-minute basis. Its battlefield involves socks with sandals, entire comic book stores shoved into a single backpack, and students that spontaneously burst into flame upon contact with the great outdoors. This week, it was Mr. Tim Weilert, self-professed "word nerd," Atari master, and vinyl record connoisseur (not to mention his "fascination" with Star Wars) that garnered him the coveted title of: Geek of the Week.

[Oredigger] **The first and perhaps most telling question, Tim, do you consider yourself a geek?**

[Tim] I would say yes. Most people probably don't consider me "geeky," probably because I do a pretty good job of hiding it.

What are some of those geeky things that people don't often get to see?

I have a love of old-school, vintage video games, and I collect and play vinyl records. I have an old Super Nintendo and Atari 600 collections, which is definitely on the geekier end of the spectrum. It's not WoW, but it is quite geeky.

Which game is your favorite?

Chrono Trigger on Super Nintendo. It's probably the greatest RPG of all time. It's a classic, and definitely one of my favorites.

So, of all of the universities out there, why Mines?

First of all, I didn't have to pay to apply. They sent me an application. My dad is an engineer, and my older brother is an engineer, and [my brother] came to Mines and graduated with a master's and a bachelor's. So, Mines has always been there. I knew that I wanted to be an engineer and so I wanted to go to the best engineering school. Plus the campus, I have to say, is really top notch.

Star Wars or Star Trek?

Definitely more of a Star Wars kind of guy. I love Star Trek too, especially for their better quality fake science, but I've always been a Star Wars kid; growing up and watching the movies. I've even submitted several clips to documentaries that have recently been made. One of my clips actually made it into a film called

"The People vs. George Lucas." It was part of another project called "Star Wars Uncut," where they cut A New Hope into ten to fifteen second clips and everyone took a clip and remade it. My clip made it into the documentary that became "The People vs. George Lucas." I do love me some Star Wars.

What do you think about the new Star Wars and Star Trek movies that came out?

I like the new Star Trek movies. They were pretty good. The new Star Wars movies I could do without. They are truly a blight on the Star Wars franchise. The characters are very flat and very stupid. The old Star Wars movies may have that as well, but they are classics... My biggest problem is Jar Jar Binks. He's just so loud and obnoxious.

If you could have any superpower, what would it be?

I've always thought that that it would be cool to fly. Even if I couldn't be invincible or turn invisible at will. I've always thought that to be able to fly and look down at things would give you really cool angles. I'm a photographer as well, so I'm always on the lookout for cool angles. Also, for transportation, flying would be the way to go. Superman style. Wings would be too much like work.

If you could, what would be the one thing that you would change about Mines?

I'm a word nerd. Which is not a bad thing, but perhaps unusual. I think that it is important for engineers to be able to write and communicate effectively. I think I would really improve the involvement of students on campus in the writing process and making people realize how important it is to communicate effectively. Even with my brief involvement in industry and seeing how the "real world" works, [I've found that] having a good grasp on writing and good communication skills will take you further than any equation ever will. If you know everything, but it's all in your head and you can't communicate it to other people... then it's just going to stay in your head. I think that it's a tragedy that we assume that engineers are bad writers. I actually think that engineers should be some of the best writers in the world, instead of needing remedial English.

What is one piece of advice that you would give to students at Mines, both current and new?

Embrace your geek. Let's face it, we're all at Mines: none of us will ever be really "cool," which is alright. It's certainly more fun to embrace the geek.

TECH BREAK

Internet Guide 2010

Ian Littman,
Tech Break Columnist

Every year freshmen become sophomores, and the need exists to get internet access from somewhere other than campus. Below is a guide to some of the options available in Golden. Keep in mind that most of the services below have setup charges involved, though you may be able to lease equipment to turn part of that setup fee into a monthly fee.

1. Comcast

The nation's largest cable provider aims to compete on service quality rather than price if at all possible, and Golden is no exception to this rule. Promotions may be available to temporarily reduce your internet bill by as much as \$25 per month for six months, and discounts are available for customers who bundle internet and TV service. Otherwise, standard prices are high, including modem rental. Expect to pay about \$60 per month for Comcast's standard-tier internet service.

That said, the company is currently the fastest internet provider in town, with standard speeds of 12 megabits per second (Mbps) on downloads and 2 Mbps on uploads. Plus, their PowerBoost technology kicks in for web surfing and small downloads to increase speeds even more. Comcast's top speed tier is a whopping 50 Mbps down and 10 Mbps up (and they actually deliver on that speed; I've tested it). However, the cost for such speed is high, around \$120 per month including modem rental if you don't get TV service. Comcast does offer a low-speed tier at \$35 per month plus modem rental at \$5 per month to rent, though you can buy a standard modem for about \$35 if you know where to look. However, speeds on that tier are just 1.5 Mbps down and 384 kbps up; Qwest is generally a better buy at that point.

Comcast does have a 250GB monthly data transfer cap on residential accounts - you can look up their rather conservative usage meter on Comcast's My Account site. However, the company only cuts off users who repeatedly transfer far more than that and are the leading sources of network congestion in a given area. Peer-to-peer file sharing, or newsgroup downloading, can be a cause for blowing past the cap, yet most users will be unaffected by both this and Comcast's throttling policies, which temporarily de-prioritize users on congested systems who have been downloading nonstop for fifteen minutes or more. Comcast also does not impose a transfer cap on their business-class service, which starts at \$60 per month, albeit with a contract and hefty installation fee.

2. Qwest

Qwest recently - finally - started building Fiber to the Node

ADSL2+ service in Golden, with a top speed of 12 Mbps on downloads, though whether you can get the service is hit-or-miss. I'm limited to 5 Mbps at my apartment due to the way Qwest has wired the area. Uploads are 896 kbps across the board, though on both downloads and uploads you have to factor in a 15% penalty on speeds due to the overhead involved on Qwest's DSL network.

This means that "12 Mbps" service is actually closer to 10 Mbps on downloads and 700 kbps on uploads, something to realize if you are comparing their service with Comcast's, which tends to deliver speeds above what's advertised rather than below. Qwest does have more efficient, higher-speed infrastructure online in some parts of Denver, kicking out upwards of 20 Mbps down and 5 Mbps up, however Golden is not one of the areas where this higher-speed connectivity is available.

Pricing, on the other hand, is very good with Qwest. The company is currently offering any tier (low or high speed) for \$25-\$30 per month for six months without having to buy a phone line along with the service. After the six months are up, the price for 12 Mbps internet goes up to \$50 per month, with slower tiers costing less.

One thing to note is that Qwest is on the cusp of merging with CenturyLink, a telephone company with roots in rural America and a penchant for pushing copper infrastructure a bit harder than the standard telephone company. This might mean higher speeds through the same old DSL lines (for example 25 Mbps down and 2 Mbps up). However, the company's pricing is rather unimpressive in their current markets, and the transition to CenturyLink services likely won't happen for another year or two.

3. US Cable

This provider serves areas where Comcast does not, assuming there's cable in the ground at all. There isn't much information available on the company's website, however it appears as though their pricing varies from \$25 to \$55 depending on the internet speed requested. \$43 per month gets 8 Mbps down/512 kbps up and \$55 gets 12 Mbps down/1 Mbps up. The company used to have rather low data transfer caps on their internet service, but I was unable to confirm whether this is still true. Note that if you can get Comcast you can't get US Cable, and vice versa.

4. Skybeam

Skybeam is a fixed wireless provider that claims to offer 5 Mbps on downloads and 2 Mbps on uploads for \$40 per month, with a package about one-third of that speed for \$10 less. From what I hear though, the company has had issues keeping their network functioning reliably, has poor customer service, charges additional money (\$10 or \$15 per month) to lease equipment, and cuts customer speeds in half for each gigabyte that they transfer on a given day. In some areas their service is workable, however I have heard no compelling reason to get their service over Qwest or Comcast's, though Qwest sometimes has reliability issues of their own.

5. Mobile Broadband

AT&T, Verizon, Sprint, T-Mobile, and CricKet all offer some measure of 3G connectivity in Golden, with Sprint adding WiMAX "4G" service in the near

Pricing, on the other hand, is very good with Qwest. The company is currently offering any tier (low or high speed) for \$25-\$30 per month for six months without having to buy a phone line along with the service.

future and T-Mobile upgrading their network to similar or higher speeds via HSPA+ with a similar time frame. However, none of these services currently offer the speeds available with a wire-line connection, and all of the above providers will either charge hefty fees or throttle download and upload speeds after between 2.5 and 10 gigabytes over a month's time.

Virgin Mobile, a prepaid provider owned by Sprint and running on their network, launched an unlimited prepaid mobile broadband service for \$40 per month a few days ago, changing the above landscape significantly. Unfortunately, the company's network, which diverges from Sprint before it hits the internet, is currently a victim of its own success, with low speeds during evening hours. As such, it's probably a better idea to wait for Clear WiMAX to come to Golden, with a more robust network and higher speeds if you want to use wireless internet as your sole method of getting online.

As always, comments, questions, clarifications and discussions regarding this article are welcome, either via e-mail (ilittman@mines.edu) or via the comments section on the web version of this article. Next week, barring more interesting news, I'll be discussing why iTunes downloads may not be going at full tilt on Comcast and Qwest internet connections, though everything else on those connections may be in top condition, and despite the fact that iTunes content practically flies over the wire on-campus.

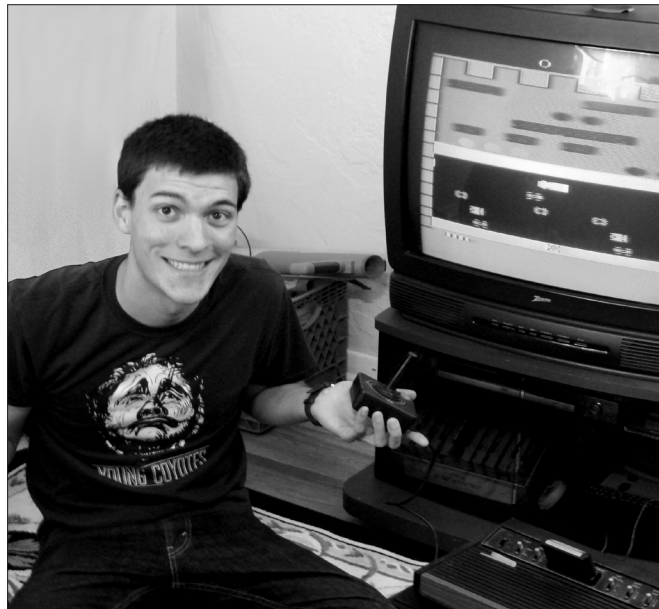


PHOTO BY ROBY BROST / OREDIGGER

NFL 2010 season preview

Trevor Crane
Content Manager

It is once again football season in America, and starting Sunday my attention will be diverted from Circuits, Statics and whatever homework I forgot to do. While last season's Super Bowl matchup between Indianapolis and New Orleans was predicted at the beginning of the season, the 2010-2011 is filled with question marks.

Below are previews for some of the prominent contenders for the Lombardi trophy this season, in addition to my beloved Broncos, who will undoubtedly make me cry this year.

Indianapolis Colts

This year's Indianapolis Colts team looks nearly unbeatable on paper. Coach Caldwell is entering his second season with more experience under his belt and a developing defense looks to be a great improvement upon last year with the return of Bob Sanders. And how can you forget Peyton Manning? The only thing more intimidating to a defense than Peyton Manning is seeing an angry Manning, who just narrowly missed winning the Super Bowl a year ago.

New Orleans Saints

The Saints return with the same deadly force that dominated nearly every defense in the league last year, including a confident Reggie Bush. But the Saints did not make very many moves during the offseason, and with a repeat of last season's incredible performances unlikely, I suspect an early exit from the 2011 playoffs.

New York Jets

No other team has witnessed such media attention as the New York Jets during the offseason. They have added key players on both sides of the ball and look to

have the personnel ready to contend deep into the playoffs. But there still is mystery surrounding the play of youngster Mark Sanchez. With so much hype, there is a good chance for a long, hard fall back to earth for the Jets.

Dallas Cowboys

For the first time in a long time, the boys from Dallas seemed to witness a relatively quiet offseason (aside from Dez Bryant). If this Cowboys team can remain focused for ALL 16 games this season, I predict that Dallas could be the team to beat in the NFC. Tony Romo is overdue for a winning season and with stars like Miles Austin and DeMarcus Ware contributing, The Cowboys will be a scary team.

Green Bay Packers

The Pack up north could be a strong contender along with Dallas for the NFC champion. Aaron Rodgers is quickly becoming an elite quarterback and the offense impressed during the preseason. The main force opposing the Packers will be their division rivals, the Minnesota Vikings. If Green Bay can overcome a depleted Minnesota and win the NFC north, they could make a deep run.

Denver Broncos

Oh, Denver... if only I could jump five years into the future, when Tim Tebow is a veteran QB, the young offensive line solidifies, and we are not suffering from more injuries than Evil Knievel. But, until then, I will probably have to endure a 7-9 season, at best. Broncos, I just ask one thing: please, at least beat the Chiefs and Raiders

Super Bowl Prediction: A few months from now, I expect the good old Colts and Cowboys super bowl that Jerry Jones is so desperately hoping for down in Texas for 2011.

CSM Rolls SDSMT

Trevor Crane
Content Manager

On Saturday, the Orediggers took on South Dakota TM, winning 52-24 netting 474 yards total offense. Junior Clay Garcia was pivotal to the game, catching 31 of 50 passes thrown to him and gaining 415 yards for the team.

Two first quarter touchdowns for the Hardrockers and Mines fell behind early. But the offense continued to roll behind Garcia and closed out the first half with a 21-3 run to take a 28-17 lead into the break. The Hardrockers kept the score close throughout the second quarter, but two key red zone stops by the Mines defense that kept South Dakota out of the endzone, including a blocked field goal, allowed the Orediggers to regain control by halftime.

Any hopes the Hardrockers had of getting back in the game were erased when senior Defensive Back Kyle Goracke intercepted Nick Russell on the opening drive of the second half. Six plays

and 21 yards later, Garcia connected with Tom Kastens on the way to a 21-0 run to start the third quarter.

Wide out Cody Renken led the Orediggers in receptions with 9 catches for 178 yards as the Orediggers improved to 1-1 on the season. It was the tenth consecutive win for Mines over SDSM as CSM holds the series lead 10-0.

Mines looks to build off of a strong season last year which witnessed an 8-3 record overall. The Orediggers were picked to finish second in the RMAC in the pre-season coaches poll. CSM also boasts an RMAC-high seven players who were named All-RMAC.

The win over the Hardrockers was an important rebound for Colorado School of Mines, who suffered a tough loss to Washburn last weekend at Folsom Field for the second straight year. Mines has a bye week next Saturday and picks up play September 18 at New Mexico Highlands, a team that CSM lit up for 69 points a year ago.

Game, Set, Match - A Look at Tennis Club

Alan Nguyen
Staff Writer

When it comes to Mines, sports are not the first thing that comes to mind. When a discussion comes to sports, you usually hear something along the lines of football, basketball, or other national favorites. One sport, however, remains under the radar for many people - tennis. And among the extensive extracurricular activities offered on campus, there is a club that is devoted to tennis.

Sean Gueck, current president of tennis club, explains what tennis club is all about, stating, "Tennis club encourages students to exercise and compete in tennis. We try to organize practices and events. The ultimate goal is to allow students to compete with other schools." Many students are afraid to join due to lack of experience, which Sean clears up, "The only requirement is a desire to play and [that] all skill levels are accepted whether you are a beginner or the next Andy Roddick." The club has competed in years past against schools such as CSU, DU, and UNC. Last spring, a few Mines players attended a tournament in Casper, Wyoming, taking second place behind DU in a tie-breaker. Now you might be

wondering, why tennis club as opposed to Club Tennis? Sean broke it down, explaining why the club is not a club sport, "We are only a club right now and not a club sport because of participation. If we have enough participation we can become club tennis... hint, hint." Sean encourages all tennis enthusiasts to come play with the rest of the club. Meetings and play times have yet to be determined, but according to Sean they will be determined post Celebration of Mines.

Ryan Zanini, another member and the secretary of the club, explains his take on why tennis is fun. According to

him, "Tennis is enjoyable for both the casual and competitive player. Its flexibility makes it easy to email the club and find someone to play with if there is only an hour or two available a week. If someone wants to work hard at becoming better they can play almost any time and they wouldn't be restricted by the hassles of getting an entire team together for a full game." Ryan continues to explain that he is able to play at his own pace and schedule his own play time. He jokingly adds, "It also helps loosen up those muscles after an exam has its way with you." It becomes very difficult to have a reason not to play.

Whether you are just starting out or looking to win Wimbledon, tennis club is where you ought to be. Both Sean and Ryan agree that it's a great way to exercise while having fun.

If you are interested in joining and playing, feel free to contact Sean at sgueck@mines.edu or fellow member, Jared Albers at jalbers@mines.edu.

Just remember, win or lose, you'll just end up coming back to a Love-Love situation. Now who can say no to that?

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Lady Orediggers take Minnesota-Duluth to double overtime, Tie 1-1



Above, Aubrey Bagley (#2) attempts to maneuver past a Minnesota-Duluth defender.



Left, Oredigger Megan Woodworth (#12) edges past a Bulldog midfielder. Mines tied Duluth 1-1.



Above, Megan Woodworth (#12) soars sky-high to reach the ball.

Right, Aubrey Bagley (#2) continues forward while Duluth struggles to keep up.



Above, Joanna Graves (#19) stares down a Duluth forward.

Below, Kat Murphy (#11) keeps ahead of a Bulldog defender.



CSM pulls out upset

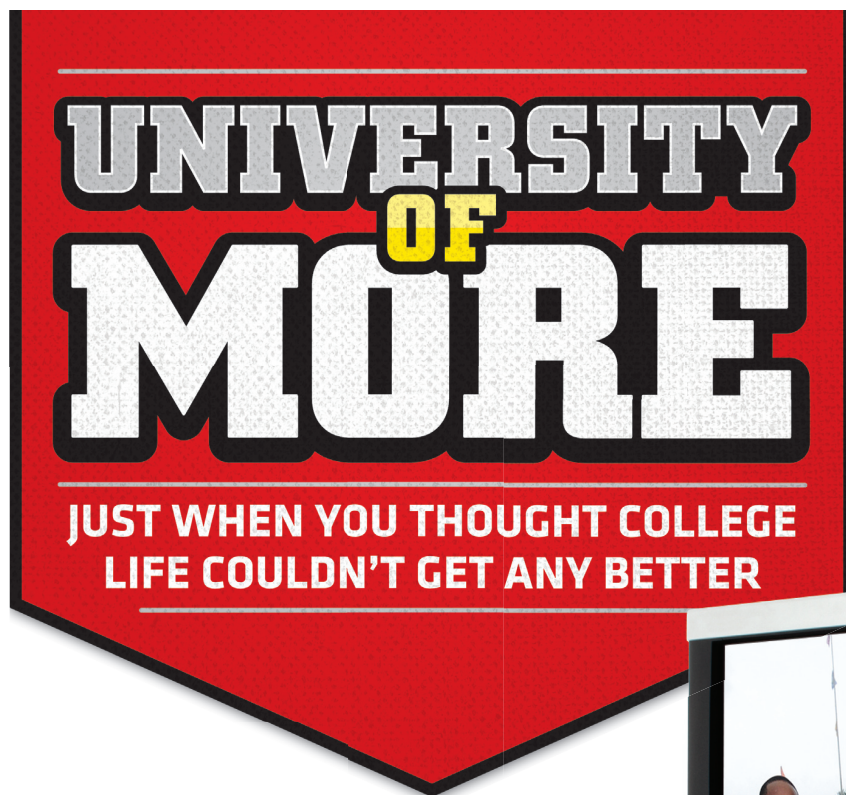
Trevor Crane
Content Manager

The Colorado School of Mines men's soccer team got a little piece of revenge Friday night, as they stunned the soccer community in pulling out the upset over the #1 ranked Fort Lewis Skyhawks 1-0. Fort Lewis, the reigning D-II men's soccer national champions, ended the Orediggers season last year in the opening round of the tournament by a score of 3-0. Friday's home game was a different story as the Colorado School of Mines controlled play for most of the first half, firing 5 shots and putting pressure on the Skyhawks defense. Junior Oredigger midfielder Philip Wilson nearly broke the score-

less tie in the 27th minute when he pushed his scoring chance wide left. Mines kept up the intensity in the second half and eventually broke through in the 49th minute when Wilson laid a pass up field for a sprinting Basaki Baker who outran the defense and beat Skyhawks keeper Nate Bell in the top right corner for the game's only goal. Junior forward Chike Sullivan and freshman Basaki Baker, both with two shots on goal, led Mines to powering a total of 6 shots on goal against Bell. The Orediggers looked solid on both sides of the ball, their crisp passing and sound defense not typical for the first game of the season. The loss ended Fort Lewis's 21-game winning streak, dating all the way back to their last loss to Incar-

nate Word in 2009. Mines goalkeeper, sophomore Manville Strand opened his season with his first career shutout with two saves. Strand, in his second season as an Oredigger, looks to have a bright future. The sophomore, the 2009 RMAC freshman of the year, was in the top five goalies for save percentage, goals against, and shutouts, and recently earned 2010 preseason All-RMAC honors along with teammates Jacob Juett and Chike Sullivan. Mines was ranked #18 in the coaches preseason poll, and won for the first time against Fort Lewis since 2004. They continue their non-conference homestand with games against #11 West Texas A&M Sept. 7 and the University of Mary Sept. 11.

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Lion Imperial Pilsner dissappoints

Bryant Pocock
Staff Writer

For the first Oredigger of the academic year, I think I should start by explaining some of the terminology of beer. Beer was first legally defined by Germany's Reinheitsgebot in 1516 as containing four ingredients: malted barley (which provides sugar and starch), hops (a flower which provides bitterness), water, and yeast (a micro-organism which converts sugar into alcohol and carbon dioxide bubbles). All beer varieties are ultimately different combinations of these ingredients, but can also be divided into two major categories: ales (fermented at room temperature) and lagers (fermented at cold temperatures, and usually with a cleaner, crisper flavor). In general, most mass-produced beers like Coors or Budweiser are lagers and most microbrews are ales. You can learn more about beer by touring the Coors brewery or any of our state's many microbreweries, or by reading this column.

My friend spotted the Lion Imperial Pilsner imported from Sri Lanka at the Applejack's liquor store and generously shared a bottle with me. Weighing in at 8.8 % alcohol (almost twice that of Coors), this beer definitely earns its "Imperial" title and could more accurately be de-

scribed as malt liquor. The flavor is rather light for a pilsner and, as expected, dominated by alcohol and lager yeast. There is also a sticky-sweet malt flavor and a slightly "off" flavor, most likely from corn-based adjuncts (think Keystone Lite or other cheap beer). The mouth-feel is similarly heavy and viscous, reinforcing my previous malt liquor associations. Unlike most pilsners, very little bitterness or hop aroma exists. Too bad, since a little bit of hop bite would provide a much-needed balance to the sweetness and alcohol flavors. The color and carbonation, on the other hand, are what you would expect from a pilsner, with a light amber hue and about half an inch of head. There is none of the skunky flavor often associated with imported lagers such as Heineken, however, which can occur when hop flavors break down during long ocean journeys or when exposed to light.

Ultimately, I cannot recommend this beer, even for those who enjoy high-alcohol beers (you are better off with a New Belgium Trippel or Oskar Blues Old Chub in that case). Even though I'm generally a beer guy, in this case I prefer Sri Lanka's tea exports to its beer. I give Lion Imperial Pilsner a D+, or maybe a PRG - the Lion Ceylon Brewing Company should really start over and try again.

Motion City Soundtrack to Denver in fall

Stephen Hejducek
Staff Writer

Formed in 1997, Motion City Soundtrack has been rocking the airwaves with their pop punk attitude, catchy rhythms, and geeky lyrics. Eight years ago when the hit single "Everything is Alright" made it onto MTV, Motion City Soundtrack has been creating unique pop punk music that can best be described as varied and sporadic. Their newest album, My Dinosaur Life, was funded by Blink-182's own bassist Mark Hoppus, but the band would have never made it to this point if it was not for the success of their second album, "Commit This to Memory." Ever since then, Motion City Soundtrack has opened for bands such as the All-American Rejects, Fall Out Boy and Metro Station, just to name a few.

Motion City Soundtrack's inspiration comes from bands like the Flaming Lips and Jawbox, which have both been described as punk groups. The band also draws inspiration from psychedelic rock and indie backgrounds. Motion City Soundtrack's lead vocalist Justin Pierre claims that most of the lyrics of his songs are from people whom he believes to tell stories.

The band has had much turmoil over who should play which instrument in their early years and as a result only two members of the band are original members, but by 2002 the band's current line-up was established. Justin Pierre (lead vocalist and guitarist) and Joshua Cain (backing vocals and guitarist) are the only original members of Motion City Soundtrack. The other members of the band include Jesse Johnson (Moog synthesizer and keyboardist), Matthew Taylor (bass guitarist, pianist, and backing vocalist), and Tony Thaxton (percussionist and backing vocalist).

After four albums, Motion City Soundtracks' success is based mostly upon the band's determination to constantly be on tour. By not headlining, Motion City Soundtrack has played many smaller shows at smaller venues. An example of this is their appearance in Denver at the Summit Music Hall this October when they open for Say Anything. So if tests are not too overbearing around October 23 and you have around twenty-five dollars burning a hole in your pocket, why not head over to the Summit Music Hall in Denver and support Motion City Soundtrack and hear some good music in the process.

Campus construction

ALL PHOTOS IAN LITTMAN / OREDIGGER



Above, crews try to keep dust down as destruction of the Alumni building progresses.



Above, heavy equipment moves in for the kill, tearing down the CSM Alumni building, formerly the Jefferson County Jail, to make way for Marquez Hall.

Scott Pilgrim vs. the World takes humor to the next level

Stephen Hejducek
Staff Writer

Flashing lights, loud noises, and amazing music all describe Scott Pilgrim vs. the World. Released on August 13, Scott Pilgrim vs. the World went mostly unheard of for the first few weeks after its release. Despite general approval by critics, the movie has only grossed about \$26 million compared to box office hits, such as Toy Story 3, which took in over \$400 million.

Scott Pilgrim vs. the World is great for anyone who has played games on the SNES. The retro game aspect of the film adds

an inventive and hilarious, not to mention flashy, special effects that makes the viewer feel like they are actually playing a game.

Unlike his previous movies, Michael Cera plays a slightly different character with his role as Scott Pilgrim. The script even glosses over Michael Cera slightly, causing the movie to actually be about the plot instead of one actor in particular. No longer does Michael Cera play that socially-awkward kid who only finds one girlfriend as he is now the guy in a garage band. And the band, Sex Bob-Omb, make a pretty good name for themselves in Toronto, Canada.

Scott Pilgrim Vs. the World

causes Michael Cera to play a new character who has been out of high school for a few years and is more of a heart breaker than a lover maker.

Overall, Scott Pilgrim Vs. the World is a great movie for a date night. There is romance for her and plenty amounts of gratuitous violence that will satisfy any guys' action needs. The humor in the movie is both guy and gal friendly because it is neither too gross nor is it too subtle.

Scott Pilgrim vs. the World, though largely unnoticed, is an amazing film that will keep you laughing and rocking out until the last second.

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Minds at Mines

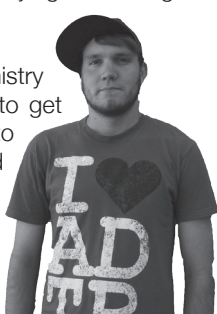
Trying something new

Roby Brost
Staff Writer

As the school year begins anew, things both commonplace and exciting are no more. Summertime is but a pleasant memory - that summer job, staying in bed past six in the morning, going to bed late at night or early in the morning just for the heck of it, that concept formerly known as free time... Yet, as many good things do, it is not a surprise that summer too has come to an end. That said, the end of summer brings with it many new things, some good, others not so much. There are new classes, roommates, jobs, homework assignments, schools, and sleep schedules. New worries and anxiety ridden days and weeks before exams. In times like these, when it is tempting to mourn those lazy mornings and summer tans, it is important to remember that just because summer is over does not mean that there is no time to try some new, fun things as well. In addition to work and school, there is play. Perhaps it is a new club to try, a new plan for success, or a job from which personal satisfaction is derived - a chance to think every time a new piece of information is filed, I don't have to ask about a person's desire for fries. This week as the weather was kind enough to remind us of the bygone days of summer vacation, Minds at Mines wanted to know, Who's trying something new?

This year I am trying a new job in the Chemistry Department. I'm doing that because I'm trying to get into Chemistry and figure out what I actually want to do with Chem, instead of just floundering around in a major. Not trying to figure out at the last minute what I want to do with my life. I want to get into this new job and see what I'll be doing in real life, in industry.

Harrison Neal

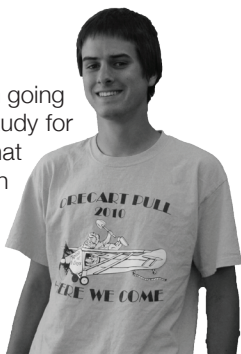


I'm going to try to keep up with my homework for once. That's something new. Once I get it, I'm going to do it, get it done. I'm also going to dress up and spruce up my resume over at the Career Center, going into the Career Fair with the intent to earn an internship for the summer. Hopefully I'll get one, start making some money and start looking ahead to paying my tuition.

Eliot Hill

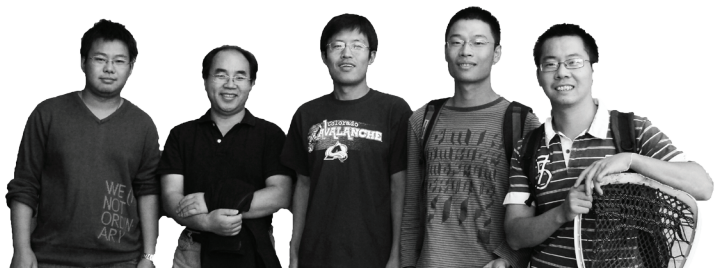
Something new for this semester is that I'm going to take a more active role in my classes and study for my exams. I'm going to do the extra work that you don't need to turn in, so that I'll do much better on my tests. That way instead of doing nominally on my exams, I'll do better, and possibly get above a 3.0 GPA this semester.

Evan Rowland



We [the group of us] are undergrads, graduate students and a professor. Many of us are trying something new this semester. We played many games and won some neat prizes at Celebration of Mines. The Arthur Lakes library had some fun brain games. Of the clubs we visited today, some of us may try the drilling club, and the underground tunneling. [Some members pictured below] will play basketball again, perhaps in the coming semester.

Kun Wang, Changshun Sun, Huayang Zhu, Fufuo Ma, Yuan Liu



For the past two years I've been writing Minds at Mines; stalking the unsuspecting populace with a smile, a question and a camera. I'm trying something new and passing the torch to a new Minds at Mines writer. I'm not sure yet what the something new will be, but something interesting, I'm sure. Best of luck with the new classes, jobs, and exciting adventures. My something new is not likely to include a scientifically tested approach to figure out who is likely to give me quote and a picture. But hey! That's why it's new.

Roby Brost



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What's your Beef?



We need more parking.

Given the fact that the Q and F lots are almost never completely full, I will presume that you mean that we need more parking at locations nearer the classes you attend. Moving forward, long term parking (parking for those who live in the residence halls) will be migrated to the Q and F lots. That measure will be delayed by the fact that parking passes have already been allocated. However, there currently is an effort to persuade those living in the residence halls to park in those lots to allow those who commute to campus daily to have access to closer spaces. As to the oversold state of the General parking permits, there are plans to raise their price relative to Commuter parking so that General parking will not be quite so oversold.

and focus group conversations. In the end, however, much of the end quality depends on the on-site staff and facilities. In the case of Mines, the Slate Cafe is operating above the kitchen's capacity and has for years.

A frequently suggested solution is to entice fast food chains to come to campus. However, the most cost effective way to put a Burger King, Starbucks, or any other chain on campus is through Aramark or a very similar company. But in those cases, franchise fees come as an additional cost to those charged by Aramark or a competitor. By using Aramark or a similar company the cost of running franchises is reduced because staff, deliveries, etc. can be shared between the several restaurants.

Alec Westerman
ASCSM President

Please fire Aramark, the food here sucks!

The food issue on campus is being looked at and specific suggestions are being followed up on. The changes detailed in a recent campus wide email were a direct result of comments and concerns. However, firing Aramark is not as simple or as beneficial as it might seem. When selecting a food vendor, the campus must weigh the cost to students, the quality of the food, and revenues for the campus. The next time that the contract with Aramark expires or is renegotiated all of these factors will be considered. The quality of the food will be determined through taste tests

Rage against the machine

Anonymous PO'ed Mines Student

Since I came to this school, I've been continually amazed at how professors and others in various academic departments seem to think that online homework is somehow the best thing for us. Physics has CAPA, Statics has Mastering Engineering, and Mechanics of Materials has added an online homework set. At least we don't have to use calc-checker anymore. Having homework online isn't the problem, though. That's actually quite nice; we can work on it at our leisure, and we aren't restricted to a specific time or place.

No, the issue is the programs themselves. CAPA used to be the bane of my existence, but having seen Mastering Engineering, there is a new horror in my academic life. Not only does the program hate your guts and refuse to grant you the common decency of telling you what you're messing up, it penalizes you for entering the incorrect answer! At least CAPA gives you 10-15 tries (Physics 2 and Physics 1, respectively) and you got full credit whether you used nine tries or one.

Mastering Engineering takes off 3% for each incorrect answer, and only gives for 6 tries. It's not all bad, though. If you're incredibly smart (or incredibly lucky), and you answer correctly on the first try, you can get 110% on that problem. This is only a remedial thing, though, because you will very rarely get the oh so illusive correct on the first try. Some questions give you the option to look at a hint, for a 2-4% deduction, depending on the instructor.

Now, this is all made worse by the fact that the parsers that interpret algebraic equations are very particular about how you must en-

ter said equations. In CAPA, if you aren't very exact about your placement of parentheses and signs, it will reject the answer outright. I have personally had Dr. Kohl tell me that I had the correct equation, and then CAPA wouldn't accept it. As you can well imagine, this is very upsetting. The problem is that computers don't possess sophisticated AI and are incapable of interpreting slight variations from what they've been pre-programmed to accept. You may have the correct equation, but if you have a term somewhere that CAPA didn't expect it, you're screwed. It's that simple.

It's aggravating when CAPA thinks you're stupid and won't accept an answer, but it's even worse when Mastering Engineering does it. Not only do they flip you the bird, they shoot your arm off and take away credit that you deserved. Hey, there's no difference between a vector starting at the center of a tiny ring and the outer edge of a tiny ring! It's a freakin' FBD, the forces act on a point!!! . Geez. Anyway, I have very little patience when it comes to online homework programs, as I'm sure you are now well aware.

Not all online homework programs are bad, in fact, there are some that make life easier and are actually helpful. One example of just such a program is the online quiz program I used when I took Chemistry. This was at another school, which, in my opinion did a much better job at teaching chemistry. But that's another rant for another article. The program of which I speak was explicitly for quizzes, so it was just multiple choice, no

algebra nonsense or any of that junk. Now, this program didn't give you ten tries, but if you paid attention in class and knew how to use your textbook, you didn't need more than two tries, which you did have. It wasn't difficult to get 97% with this program, unlike Mastering Engineering.

All of this is to let my fellow students know that their voices are being heard, and to send a message to our beloved faculty: Quit penalizing us for entering the wrong answer, and fix those defective problems that don't know what a true FBD is. It's not hard. Also, why should we have to input our algebraic answers? You can see if we're doing it correctly or not, stop making us try to figure out which way CAPA wants it.

People say that Mines is in the top three most depressed schools in the nation, and I think this is partly why. I know that I've personally experienced a sharp increase in hair loss since I returned to school, and it's only the third week!

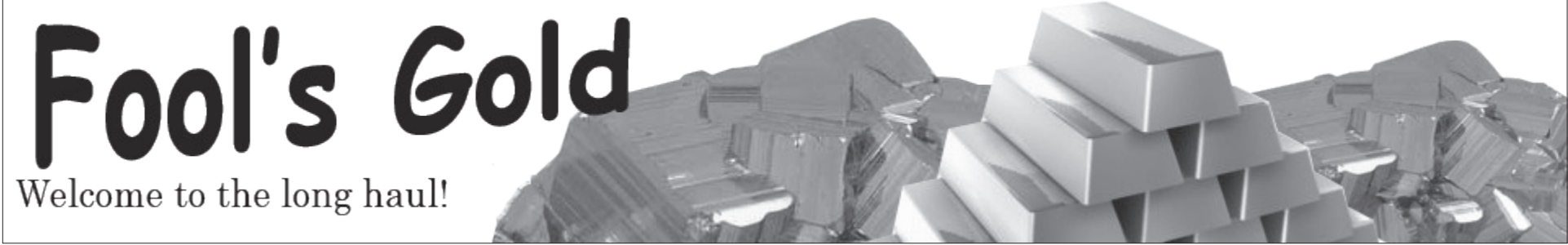
If I may add one suggestion: Ask students what they think of the programs used in their classes, and take their feedback seriously. Yeah, there are some who just like making a stink about stuff, but most of us really do want a better learning experience. This has been a message from your friendly neighborhood PO'ed Mines Student.

Not only do they flip you the bird, they shoot your arm off and take away credit that you deserved.

Quit penalizing us for entering the wrong answer, and fix those defective problems that don't know what a true FBD is.

Editorial Policy

The Oredigger is a designated public forum. Editors have the authority to make all content decisions without censorship or advance approval and may edit submitted pieces for length so long as the original meaning of the piece is unchanged. Opinions contained within the Opinion Section do not necessarily reflect those of Colorado School of Mines or The Oredigger. The Oredigger does not accept submissions without identification and will consider all requests for anonymity in publication on a case-by-case basis. Submissions less than 300 words will receive preference.



THE RUMOR MILL

As semester begins, so does parental counseling

Campus rumors debunked

Ian Littman
Miller Light

Rumor: Mines will build a parking lot in place of the demolished Jefferson County Jail building, which previously housed the Mines alumni office and an assortment of expensive vacuum tubes.

Status: Confirmed. The new "BP lot" will be financed by in-kind donations from its namesake oil company. Marquez Hall has been put on hold until Petroleum Engineers get chased out of Alderson by the Chemical Engineering department. Facilities Management says that, due to the central location of the new lot, parking passes for the lot will be \$200 per semester. Parking in the Hall of Justice lot will carry an increased price as well to pay off the cost of the parking kiosks (both of them) in the areas.

Rumor: The Economics & Business and LAIS departments have teamed up to form a new major group, dubbed "Language, International and Entrepreneurial Studies," or LIES for short.

Status: Confirmed. True to the campus master plan, increased diversity will be available to students starting the fall semester of next year. Majors will include Marketing and Social Sciences. An Administrative Assistant program will be offered.

Rumor: Full body scanners will be set up at the entrances to testing facilities for Chemistry, Physics and Calculus tests.

Status: Confirmed. The expense for these scanners will be added as a \$20 line item on the tuition bills of anyone not taking the above courses.

Rumor: The Gravedigger will return.

Status: Busted. This message brought to you by "No, we won't drop the price of our products" Sony. So trust us... really.

Janeen Neri
Helicopter Parent

A new fall semester means two things at Mines: a large group of anxious freshmen and a group of even more anxious parents trailing in their wake. For several years now, the Colorado School of Mines (in partnership with the National Renewable Energy Laboratory) has offered optional group counseling sessions for the new empty-nesters. Said program founder Vera Sault, "Our program is unique because it doesn't talk down to the parents. We understand the emotions that they're processing now that their baby is in college, and much of the program is about just letting them vent. It's amazing how helpful that can be."

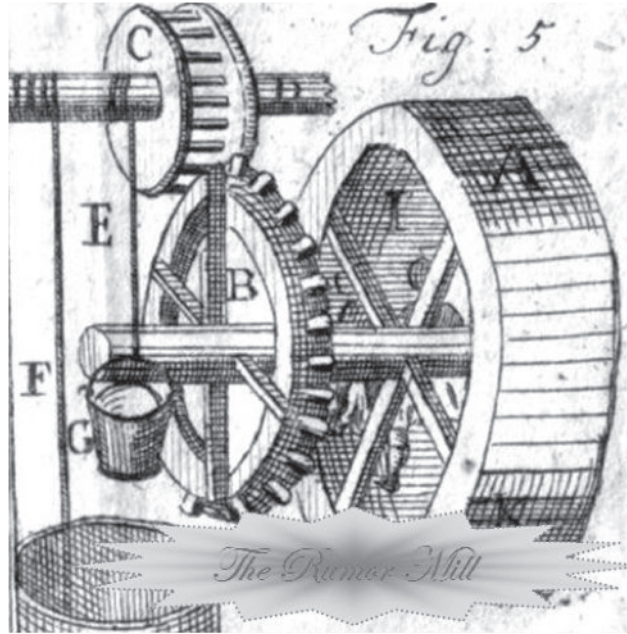
In addition to sessions with other parents, the program also features field trips around the Mines campus. "It helps a lot," Sault said, "when the parents aren't cut off right away, when they can still feel that strong connection with what their kid is doing." To help the parents feel more involved, the field trips focus on the mundane parts of a freshman's life, things like getting paperwork into HR or registering for classes. "We have this neat program," Sault

continued, "where parents in the counseling can figure out their child's entire schedule, right up until graduation. This helps parents feel less stressed about what electives their kid might choose and it helps the students because they don't have to lift a finger at registration for the rest of their college career — assuming they pass all their classes, of course!"

Fortunately, children of parents who elect to take the counseling sessions have been shown to have much higher GPAs than those whose parents make them fend for themselves. "For each of my classes, I get a roster that tells me which bright young students had parents in the program," said biology professor Joseph Buffet, "and I already know who will, shall, *must* excel that semester. These individuals are able to pull effortless A's time and time again, and they would

never, ever cheat. The few times that I had misunderstandings with them, it was all cleared up after a heartfelt chat with their folks. The great thing about involved parents is that they're always willing to help me correct errors that make

it appear like their children are doing poorly." In short, Sault explained, "It's a win-win. Parents don't have to lose that special connection they have with their offspring and their kids have a smoother transition from high school to college when their parents can keep on clearing out all the consequences and obstacles that stand in the way of their babies' success. And starting this year, it's a win-win-win, because NREL has finally perfected a way to harness the parents' helicoptering tendencies to provide a steady, unlimited supply of green wind power."



Top ten best foods to eat at the Slate

Ian Littman
I eat real food.

- 10) Cookies
- 9) Soup of the day
- 8) Waffles
- 7) Pizza
- 6) Sandwiches... watch the bread...
- 5) Chicken fried steak
- 4) Lasagna
- 3) Cereal
- 2) Ice cream
- 1) Chipotle... oh wait...

Ian Littman
500 Internal Student Error

Following last Saturday's extended Blackboard outage, CCIT proudly proclaimed that they had reached a pivotal point in their existence: a running track record of less than 99 percent uptime, when all systems were taken into account, for servers directly under their control. This momentous event, said CCIT co-director Fred Robinson, "Hasn't happened since we switched to outsourced e-mail a year ago. We feel that the resurrection of our 9x2 initiative is a good step toward keeping CCIT relevant in the days to come."

When pressed to describe what exactly the 9x2 initiative was, Robinson stated, "These days the reliability of hardware has taken all the humanity out of computing. We believe that the instant-gratification culture of reliable technology is detrimental to society, whether the resulting addiction is to WoW or checking Blackboard to see whether your professor has uploaded lecture notes for the class that happened yesterday." Robinson continued, "The 9x2 initiative, pioneered during AC&N days... before the time of current freshmen and sophomores... seeks to make sure vital

electronic systems on-campus have sufficient downtime over the course of a month that students will do something else with their lives. That or direct their frustration at electronic systems rather than an overly difficult, or deficient, LAIS or Calculus 3 professor. Whatever works."

The name for the initiative comes from CCIT's goal to maintain, at most, 99% uptime for all systems on campus for which they have control. That translates to between 7.2 and 7.44 hours of downtime per month, preferably on weekends, when students do a surprising amount of their homework. February, despite being a shorter month, gets a benchmark equal to September: 7.2 hours of downtime or bust. "So far, we're meeting our goals," explained CCIT minion-in-chief Bill Konig, citing outages in Blackboard, Trailhead, and upcoming scheduled maintenance during inopportune times for the Exchange-based mail system used for faculty and campus staff. "Students are not the only target audience for 9x2," Konig clarified.

In the past, CCIT has collaborated with Facilities Management to induce downtime in such systems as the Blackboard-powered key card system, using pre-alpha

firmware upgrades to, innocently enough, reduce the system to total inoperability. "We found that, while effective, the card system shutdown also prevented us from doing our work, so we're trying to keep that from happening," Robinson said, declining to mention the manner, or usefulness, of work that CCIT would otherwise be performing during those times.

One item of note is that, via redundant servers and a distributed architecture, including load-sharing with other universities, the Physics department has been able to keep telecom-grade uptime statistics on their LON-CAPA system, though at times the system has been slow due to processing test scores or frantic Physics II students trying to answer "0" for remaining homework problems five minutes before the section closes. "CCIT has their goals, we have ours," explained Physics Department IT head Charles Rok. "We think that keeping our systems online is in the best interest of our students; having scheduled maintenance at 3 AM would disrupt the work flow of our juniors and seniors." Department head Jim Furlong was unavailable for comment due to an SCP (Society of Creepy Physicists) meeting in Denver.

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